MA0101516
AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended (M.G.L. Chap. 21, §§26-53),

Town of Erving
Board of Selectmen
Erving, MA 01344

is authorized to discharge from a facility located at

Erving POTW #1
16 Public Works Blvd., Village of Millers Falls
Erving, MA 01344

to a receiving waters named

Millers River (MA35-05)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective upon the date of issuance.

This permit and the authorization to discharge expire at midnight, September 30, 2007.

This permit supersedes the permit issued on September 24, 1998 and expired on October 24, 2002.

This permit consists of 11 pages in Part I, including effluent limitations, monitoring requirements; Attachment A, sludge requirements and 35 pages in Part II, including General Conditions and Definitions.

Signed this 11th day of May, 2004

/S/
SIGNATURE ON FILE

Linda M. Murphy, Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1.a. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number **001,** treated effluent to the Millers River. Such discharges shall be limited and monitored by the permittee as specified below**:**

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS				MONITORING REQUIREMENTS		
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE[3] TYPE**
FLOW	**********	**********	1.02 MGD[2]	********	**********	CONTINUOUS	RECORDER
BOD_5 [4]	255 lbs/Day	383 lbs/Day	30 mg/l	45 mg/l	Report mg/l[1]	1/WEEK	24-HOUR COMPOSITE[5]
TSS [4]	255 lbs/Day	383 lbs/Day	30 mg/l	45 mg/l	Report mg/l[1]	1/WEEK	24-HOUR COMPOSITE[5]
pH RANGE [1]	6.0 - 8.3 SU SEE PERMIT PAGE 5 OF 11, PARAGRAPH I.A.1.c.					1/DAY	GRAB
TOTAL KJELDAHL NITROGEN	**********	********	********	********	Report mg/l	1/QUARTER	24-HOUR COMPOSITE[5]
AMMONIA NITROGEN	**********	********	********	********	Report mg/l	1/QUARTER	24-HOUR COMPOSITE[5]
NITRITE NITROGEN	**********	********	********	********	Report mg/l	1/QUARTER	24-HOUR COMPOSITE[5]
NITRATE NITROGEN	**********	********	********	********	Report mg/l	1/QUARTER	24-HOUR COMPOSITE[5]
TOTAL PHOSPHORUS (seasonal May 1 - October 31)[10]	**********	**********	1.0 mg/l	********	Report mg/l	1/WEEK	24-HOUR COMPOSITE[5]
FECAL COLIFORM[1,6] (seasonal April 1 - Oct 31)	**********	**********	200/100 ml	********	400/100 ml	1/WEEK	GRAB
TOTAL CHLORINE RESIDUAL[1,6,11] (seasonal April 1 - Oct 31)	**********	**********	0.34 mg/l	********	0.59 mg/l	1/DAY	GRAB
WHOLE EFFLUENT TOXICITY SEE FOOTNOTES 7, 8, and 9	Acute LC_{50} ≥ 100%					2/YEAR	24-HOUR COMPOSITE[5]

Footnotes:

1. Required for State Certification.

2. For flow, report maximum and minimum daily rates and total flow for each operating date. This is an annual average limit, which shall be reported as a rolling average. The first value will be calculated using the monthly average flow for the first full month ending after the effective date of the permit and the eleven previous monthly average flows. Each subsequent month's DMR will report the annual average flow that is calculated from that month and the previous 11 months.

3. All required effluent samples shall be collected from a point downstream of both clarifiers and upstream of the chlorine contact chamber except fecal coliform and chlorine residual samples which shall be taken after the chlorine contact chamber. Any change in sampling location must be reviewed and approved in writing by EPA and MADEP. All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136. All samples shall be 24 hour composites unless specified as a grab sample in 40 CFR §136.

4. Sampling required for influent and effluent.

5. A 24-hour composite sample will consist of at least twenty four (24) grab samples taken during a continuous 24-hour period (e.g. 0700 Monday - 0700 Tuesday).

6. Fecal coliform and total residual chlorine monitoring (TRC) will be **conducted during the period April 1st through October 31st only**, to reflect the seasonal chlorination period. Fecal coliform and TRC monitoring are State certification requirements. Fecal coliform discharges shall not exceed a monthly geometric mean of 200 colony forming units (cfu) per 100 ml, nor shall they exceed 400 cfu per 100 ml as a daily maximum. Fecal Coliform monitoring shall be conducted at the same time as TRC sampling.

7. The permittee shall conduct acute toxicity tests two times per year. The permittee shall test the daphnid, Ceriodaphnia dubia, only. Toxicity test **samples shall be collected during the second week of the months of July and October**. The test results shall be submitted by the last day of the month following the completion of the test. The results are due August 31st and November 30th, respectively. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Dates Second Week in	**Submit Results By:**	**Test Species**	**Acute Limit LC_{50}**
July October	August 31st November 30th	Ceriodaphnia dubia (Daphnid) See Attachment A	≥ 100%

After submitting a **minimum** of four consecutive sets of WET test results, all of which demonstrate compliance with the WET permit limits, the permittee may request a reduction in the WET testing requirements. The permittee is required to continue testing at the frequency specified in the permit until notice is received by **certified mail** from the EPA that the WET testing requirement has been changed.

8. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.

9. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in **Attachment A Section IV., DILUTION WATER** in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required in **Attachment A**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**.

10. **The permittee shall monitor effluent phosphorus, May 1, through October 31 with a total phosphorus limit of 1.0 mg/l.** If, upon completion of a Total Maximum Daily Load (TMDL) or any related water quality study it is determined that either a higher or lower limit will result in compliance with water quality standards, the permit may be reopened and modified accordingly.

11. The chlorination and dechlorination systems shall have alarm(s) to indicate system interruptions or malfunctions. Any interruption or malfunction of either the chlorine dosing system that may result in inadequate disinfection or of the dechlorination system

that may result in excessive levels of chlorine in the final effluent, shall be reported with the monthly DMRs. The report shall include the date and time of the interruption or malfunction, the nature of the problem, and the estimated amount of time that the reduced levels of chlorine or dechlorination chemicals occurred.

12. PART I.A.1 (continued)

b. The discharge shall not cause a violation of the water quality standards of the receiving waters.

c. The pH of the effluent shall not be less than 6.0 S.U., nor greater than 8.3 S.U. at any time, unless these values are exceeded due to natural causes or as a results of an approved treatment process.

d. The discharge shall not cause objectionable discoloration of the receiving water.

e. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.

f. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand. The percent removal shall be based on monthly average values.

g. When the effluent discharges for a period of 90 consecutive days exceeds 80 percent of design flow or when a significant increase in the sewer service area is planned, the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

h. The permittee shall minimize the use of chlorine while maintaining adequate bacterial control.

i. The results of sampling for any parameter above its required frequency must also be reported.

PART I.A.2. All POTWs must provide adequate notice to the Director of the following:

a. Any new introduction of pollutants into that POTW from an indirect discharger in a primary industry category discharging process water; and/or

b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

c. For the purposes of this paragraph, adequate notice shall be include information on:

d. The quantity and quality of effluent introduced into the POTW; and

a. Any anticipated impact of the change in the quantity or quality of effluent to be discharged from the POTW.

PART I.A.3. Prohibitions Concerning Interference and Pass Through:

a. Pollutants introduced into POTWs by a non-domestic source shall not pass through the POTW or interfere with the operation or performance of the works.

b. If, within 30 days after notice of an interference or pass through violation has been sent by EPA to the POTW, and to persons or groups who have requested such notice, the POTW fails to commence appropriate enforcement action to correct the violation, EPA may take appropriate enforcement action.

PART I.A.4. Toxics Control:

a. The permittee shall not discharge any pollutant or combinations of pollutants in toxic amounts.

b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

PART I.A.5. Numerical Effluent Limitations for Toxicants:

EPA or DEP may use the results of toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

B. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from outfall **001** listed in Part I.A.1. Discharge of wastewater from any other point source is not authorized by this permit and shall be reported in accordance with Section D.1.e(1) of the General Requirements of this permit (Twenty-four hour reporting).

C. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

1 Maintenance Staff

The permittee shall provide adequate staff to carry out the operations, maintenance, repair and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Preventative Maintenance Program

The permittee shall maintain an ongoing preventative maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program shall include an inspection program designed to identify all potential and actual unauthorized discharges.

3. Infiltration/Inflow Control Plan

The permittee shall develop and implement a plan to control infiltration and inflow (I/I) to the separate sewer system. The plan shall be submitted to EPA and MA DEP **within twelve months of the effective date of this permit** (see page 1 of this permit for the effective date) and shall describe the permittee's program for preventing infiltration/inflow related effluent limit violations, and all unauthorized discharges of wastewater, including overflows and by-passes due to excessive infiltration/inflow.

The plan shall include:

- An ongoing program to identify and remove sources of infiltration and inflow. The program shall include the necessary funding level and the source(s) of funding.

- An inflow identification and control program that focuses on the disconnection and redirection of illegal sump pumps and roof down spouts. Priority should be given to removal of public and private inflow sources that are upstream from, and potentially contribute to, known areas of sewer system backups and/or overflows.

- Identification and prioritization of areas that will provide increased aquifer recharge as the result of reduction/elimination of infiltration and inflow to the system.

- An educational public outreach program for all aspects of I/I control, particularly private inflow.

- The permittee shall require, through appropriate agreements, that all member communities develop and implement infiltration and inflow control plans sufficient to ensure that high flows do not cause or contribute to a violation of the permittee's effluent limitations, or cause overflows from the permittee's collection system.

Reporting Requirements:

A summary report of all actions taken to minimize I/I during the previous calendar year shall be submitted to EPA and the MA DEP **annually, by the anniversary date of the effective date of this permit**. The summary report shall, at a minimum, include:

- A map and a description of inspection and maintenance activities conducted and corrective actions taken during the previous year.

- Expenditures for any infiltration/inflow related maintenance activities and corrective actions taken during the previous year.

- A map with areas identified for I/I-related investigation/action in the coming year.

- A calculation of the annual average I/I, the maximum month I/I for the reporting year.

- A report of any infiltration/inflow related corrective actions taken as a result of unauthorized discharges reported pursuant to 314 CMR 3.19(20) and reported pursuant to the Unauthorized Discharges section of this permit.

4. Alternate Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall continue to provide an alternative power source with which to sufficiently operate its treatment works (as defined at 40 CFR §122.2).

D. SLUDGE CONDITIONS

1. The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices and with the CWA Section 405(d) technical standards.
2. The permittee shall comply the more stringent of either state or federal regulations.

3. The technical standards (Part 503 regulations) apply to facilities which perform one or more of the following use or disposal practices:

a. Land application - the use of sewage sludge to condition or fertilize the soil;
b. Surface disposal - the placement of sewage sludge in a sludge-only landfill; or

c. Placement of sludge in a municipal solid waste landfill.

4. These conditions do not apply to facilities which transport sewage sludge to another facility for use or disposal or which do not use or dispose of sewage sludge (e.g., lagoons - reed beds); or material described in 40 CFR 503.6 (Exclusions).

5. The permittee shall use and comply with the attached guidance document to determine appropriate conditions. Appropriate conditions contain the following elements:

a. General requirements
b. Pollutant limitations
c. Operational standards
(pathogen reduction requirement and vector attraction reduction requirements)
d. Management practices
e. Record keeping
f. Monitoring
g. Reporting

Depending upon the quality of material produced by a facility, all conditions may not apply to the facility.

6. The permittee shall monitor the pollutant concentrations, pathogen reduction and vector attraction reduction at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year:

less than 290	1/year
290 to less than 1500	1/quarter
1500 to less than 15,000	6/year
15,000+	1/month

7. The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR 503.8.

8. The permittee shall submit an annual report containing the information specified in the guidance. Reports are due annually by **February 19th.** Reports shall be submitted to the addresses contained in the reporting section of the permit. Sludge monitoring is not required by the permittee when the permittee is not responsible for the ultimate sludge disposal. The permittee must be assured that any third party contractor is in compliance with appropriate regulatory requirements. The permittee is required only to submit an annual report by **February 19th** containing the following information:

- Name and address of contractor responsible for sludge disposal
- Quantity of sludge in dry metric tons removed from the facility by the sludge contractor

E. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Forms(s) postmarked no later than the 15th day of the month following the effective date of the permit.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, MA 02114

The State agency is:

Massachusetts Department of Environmental Protection
Western Regional Office
Bureau of Resource Protection
436 Dwight Street
Springfield, MA 01103

Signed and dated Discharge Monitoring Report forms, toxicity test reports, and all other reports required herein, shall also be submitted to the State at the following address:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, MA 01608

F. STATE PERMIT CONDITIONS

1. This discharge permit is issued jointly by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MA DEP) under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the MA DEP pursuant to M.G. L, Chap. 21, §43.

2. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension, or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension, or revocation. In the event any portion of this permit is declared invalid, illegal, or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as an NPDES permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal, or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.